

3.11 Communications

3.11.1 Sources of Information

Information was obtained from field observations, from discussions with City of Sumas personnel, and from the Electric Power Research Institute.

3.11.2 Existing Conditions

Telephone service to the site and adjacent properties is provided by GTE Systems of the Northwest. At the site, telephone lines are located underground. In nearby residential neighborhoods, telephone lines are strung on wooden poles.

The City of Sumas has a cable television system, with dish type antennas located approximately 300 to 400 yards north of the project site. The dish type antennas are generally pointed south and approximately 60 degrees above the horizon.

3.11.3 Environmental Impacts of Proposed Action

3.11.3.1 Construction

During construction, excavations for the natural gas pipeline or the water or sewer lines could potentially damage underground utilities, including communications cables. The contractor would be required to use the state “One-Call” system to locate and mark utilities prior to construction, and coordinate with local utility providers.

3.11.3.2 Operation

The existing communications infrastructure located at the industrial park is expected to be adequate to handle the anticipated needs of SE2GF during construction and operation. Should upgrades to this infrastructure be required, they would be completed by SE2 or by the communications service provider funded by SE2. Any future upgrading that might be required would be done in a manner that would not interfere with City communication facilities.

The City’s incoming cable television signal from the satellite is a frequency-modulated (FM) signal in the 10 to 20 GHz range that would not be susceptible to induced interference from the 230 kV transmission facility. Emissions generated by the 230 kV transmission facilities would be amplitude-modulated (AM) signals and, therefore, would not interfere with the incoming FM television signals. In addition, the S2GF substation and 230 kV transmission lines would be well outside of the transmission path of the City’s FM television signals. The FM television signals are highly directional.

Therefore, based on the distance of the antennas above the horizon, there would not be an occasion for the 230 kV transmission facilities to directly interfere with the television transmission path.

The proposed 230 kV transmission line would be relatively quiet with regard to radio interference due to its double bundle conductor design. CSA Standard C108.3.1-1975 *Tolerable Limits and Methods of Measurement of Electromagnetic Noise from AC High Voltage Power Systems, 0.15-30 MHz* specifies that the fair weather interference field strength, measured at 15 meters laterally from the outermost conductor of the power line, shall not exceed 50 dB for 230 kV power lines. Using the configuration chosen for the proposed 230 kV line, it is expected that the radio interference (RI) level at 15 meters would be less than 20 dB during fair weather conditions. The RI level may increase by approximately 20 dB during rainy weather. Because buildings and roads are generally more than 15 meters from the proposed 230 kV line, it is anticipated that there would be few, if any, RI problems. RI problems can generally be mitigated by providing an antenna sufficiently far away from the closest energized conductor. One location that may require mitigation for RI is near Hazel Street where an AT&T building, an auto body shop, and a parking lot presently share the CP Rail ROW (Norecol-Dames & Moore 1999).

3.11.4 Environmental Impacts of No Action

There would be no impact to communications from the No Action Alternative.

3.11.5 Mitigation Measures

3.11.5.1 Construction

During construction, precautions would be used to ensure that excavations do not damage underground utilities, including communications cables. The “One-Call” system would be used to locate and mark utilities prior to construction, and to coordinate with local utility providers.

3.11.5.2 Operation

No mitigation measures are required for operation.

3.11.6 Cumulative Impacts

The development of the site, and the installation of communication equipment (telephones and computer connections) would contribute minimally to an increase in the need for communication services in the Sumas area.

3.11.7 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would occur to communications from the construction or operation of this project.